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*09/070,699*

APPLICATION NO. <i>09/070,699</i>	FILING DATE <i>04/30/98</i>	FIRST NAMED INVENTOR <i>DICKENSHEETS</i>	ATTORNEY DOCKET NO. <i>D A-62591-3/AJ</i>
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*MM12/1209*

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EXAMINER <i>N&amp;D.H</i>
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ART UNIT <i>2874</i>	PAPER NUMBER
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DATE MAILED: *12/09/99*

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

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# Office Action Summary

Application No.  
**09/070,699**

Applicant(s)  
**Dickensheets et al**

Examiner  
**Hung N. Ngo**

Group Art Unit  
**2874**



- ☐ Responsive to communication(s) filed on \_\_\_\_\_.
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire three month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

- ☒ Claim(s) 44-72 is/are pending in the application.
- Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☒ Claim(s) 56-69 is/are allowed.
- ☒ Claim(s) 44-55 and 70-72 is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- ☒ The proposed drawing correction, filed on Sep 28, 1999 is ☒ approved ☐ disapproved.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been
- ☐ received.
- ☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

- ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- ☒ Notice of References Cited, PTO-892
- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_
- ☐ Interview Summary, PTO-413
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Art Unit: 2874

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 44-50, 53 and 54 are rejected under 35 U.S.C. 102(b) as being anticipated by Blonder (4,932,745).

Blonder discloses a substrate (FSS), a beam steering mens (MS1), a cavity (LR3), and an optical path (F1,F3).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 51, 52 and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blonder (4,932,745).

Most of the commonly used material for supporting optical waveguide such as silicon, Lithium Niobate, etc. having different etching rate in different crystallographic planes. It is also well known in the art that V-groove can easily be formed on the surface of material having different etching rate in different crystallographic planes. Anisotropically etch is best suitable

Art Unit: 2874

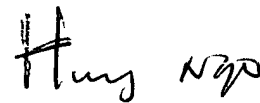
method for forming groove having precisely flat side walls. The groove in the reference required groove being formed precisely to reduce optical loss.

Claims 70-72 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 70 is incomplete.

Claims 56-69 are allowed.

Any inquiry concerning this communication should be directed to Hung Ngo at telephone number (703) 308-0297.

A handwritten signature in black ink, appearing to read "Hung Ngo".

Hung N. Ngo  
Primary Examiner  
Art Unit 2874